



# Australian Bureau of Statistics

## 6535.0 - Household Expenditure Survey, Australia: Detailed Expenditure Items, 1998-99

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## Summary

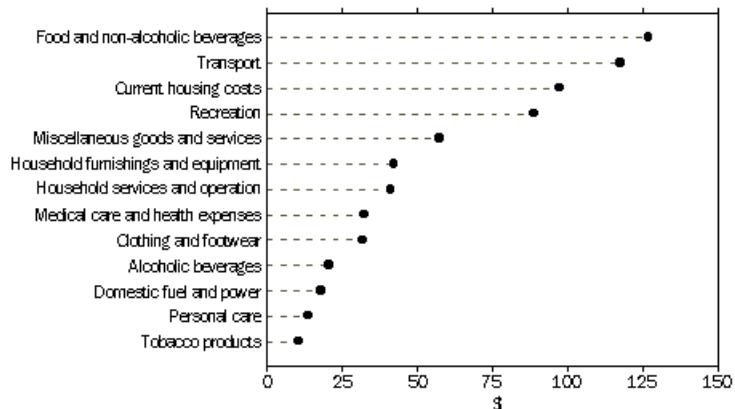
### Main Features

#### SUMMARY OF FINDINGS

#### HOUSEHOLD EXPENDITURE ON GOODS AND SERVICES

In the 12 months to June 1999, Australian households spent an average of \$699 each week on goods and services. Half of this was spent on food, transport and housing.

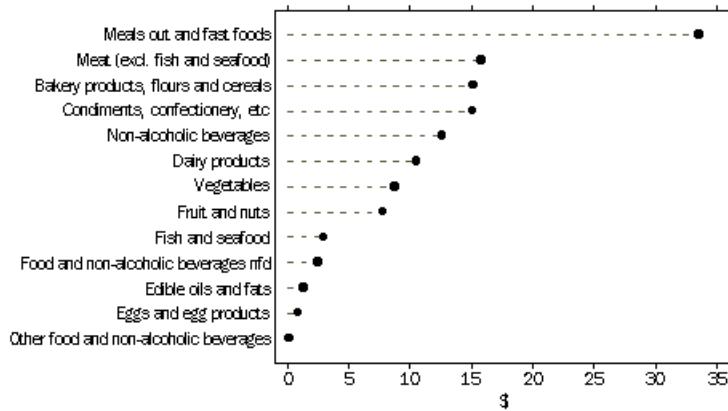
#### AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ON GOODS AND SERVICES



Average household expenditure on food and non-alcoholic beverages was \$127 per week. The most significant items of food expenditure were:

- meals out and fast foods, \$34 per week, with fast food and takeaway accounting for \$19 of this;
- meat (excluding fish and seafood) (\$16);
- bakery products, flours and cereals (\$15), the largest components being bread (\$6), cakes, tarts and puddings (\$3) and biscuits (\$3); and
- condiments, confectionery, food additives and prepared meals (\$15), more than half of which was spent on confectionery (\$8).

#### AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ON FOOD AND NON-ALCOHOLIC BEVERAGES

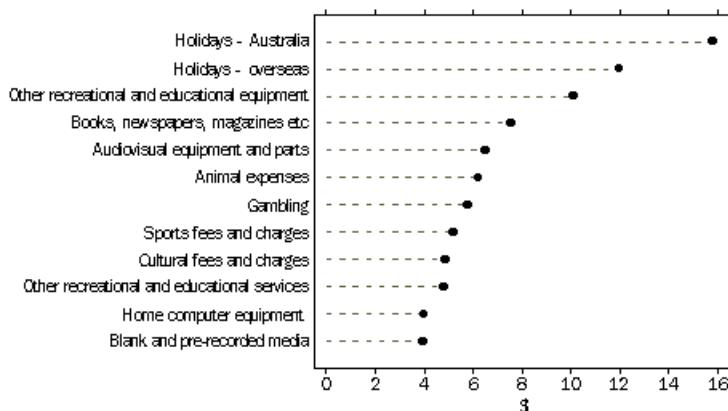


Expenditure on transport amounted to \$118 per week. The most significant items were motor vehicle purchase (\$43), petrol (\$24) and vehicle registration and insurance (\$20).

Current housing costs amounted to \$97 per week. Of this, \$38 was spent on rent and \$26 on interest payments on home mortgages.

Household spending on recreation averaged \$89 per week. Expenditure on holidays within Australia (\$16) and overseas (\$12) together accounted for 31% of spending on recreation. Other significant items were books, newspapers and magazines (\$8); audiovisual equipment (\$7); animal expenses (\$6); gambling (\$6); sports fees and charges (\$5); and cultural fees and charges (\$5).

#### AVERAGE WEEKLY HOUSEHOLD EXPENDITURE ON RECREATION



Average household expenditure on other significant broad groups of goods and services was:

- household furnishings and equipment, \$42 per week, with the major components being furniture and floor coverings (\$16); household appliances (\$11); and blankets, linen and household furnishings (\$7);
- household services and operation, \$41 per week, covering items such as telephone and facsimile charges (\$19), household non-durables (\$12) and child care services (\$4);
- medical care and health expenses (net of refunds), \$32 per week, with expenditure on accident and health insurance being \$13, health practitioners' fees \$10 and medicines, pharmaceutical products and therapeutic appliances \$8.
- clothing and footwear, \$32 per week, the major items being women's clothing (\$9), men's clothing (\$5) and footwear (\$5).

#### CHANGES SINCE 1993-94

In the period from 1993-94 to 1998-99, the average household weekly expenditure on goods and services increased from \$602 to \$699. Part of this 16% increase can be attributed to inflation - over the five years since the previous survey, the price of goods and services, as measured by the consumer price index (CPI), rose by 10%. Over the same period, average weekly household income increased by 22% and the average household size was unchanged at 2.6 people.

Comparing data in this publication to that shown in the 1993-94 issue, the broad categories accounting for most of the \$97 increase in average weekly expenditure since 1993-94 were:

- transport, up \$24 (26%), mainly due to increased spending on motor vehicle purchases (up \$16 or 57%) and vehicle registration and insurance (up \$5 or 33%);
- food and non-alcoholic beverages, up \$16 (14%), with increases in most components;
- current housing costs, up \$12 (14%), largely due to increased spending on rent (up \$6 or 18%) and repairs and maintenance (up \$3 or 33%);
- miscellaneous goods and services, up \$11 (25%), partly due to increased spending on education fees (up \$4 or 50%); and
- household services and operation, up \$10 (31%), mainly due to increased spending on telephone and facsimile charges (up \$6 or 51%).

Items which are less significant in dollar terms but on which spending has increased significantly include:

- pasta (up 43%), rice (up 56%), coffee (up 41%), frozen prepared meals (up 47%) and prepared meals n.e.c. (up 68%);
- wine, up 41%;
- dishwashers, up 75%;
- pest control services (up 114%) and gardening services and rubbish removal (up 44%);
- child care fees, up 57%;
- health practitioners' fees (net of refunds), up 48%;
- video equipment (up 57%), sports lessons (up 107%), cinema fees and charges (up 41%) and culture and recreation lessons (up 55%); and
- interest payments on credit card purchases and cash advances, up 66%.

Clothing and footwear was the only broad group in which average weekly household expenditure fell between 1993-94 and 1998-99. Average weekly expenditure on clothing and footwear declined by \$2 or 5%.

## EXPLANATORY NOTES

### INTRODUCTION

**1** This is the second publication presenting the results from the 1998-99 Household Expenditure Survey (HES). The survey collected detailed information about the expenditure, income and household characteristics of households resident in private dwellings throughout Australia. Appendix 1 outlines the full 1998-99 HES data release program and expected release dates.

**2** This publication presents estimates for over 400 items of household expenditure. Average weekly household expenditure on these items is provided for each income quintile group, and for each state, Darwin and Canberra. Some estimates with high relative standard errors have been suppressed in this publication. However, tables incorporating these estimates are available. See appendix 1 for details.

**3** The **1998-99 Household Expenditure Survey, Australia: User Guide** (Cat. no. 6527.0), expected to be released in September 2000, will assist users in evaluating and interpreting results from this survey.

**4** The 1998-99 HES is similar to the 1993-94 survey. The main differences are:

- while the paper diary was retained, a computer assisted interviewing (CAI) technique was used to collect data from households and individuals. This reduced the possibility of sequencing errors and enabled some issues to be clarified through a series of edits at the time of interview, resulting in higher quality of input processing;
- the survey weighting process for the 1998-99 HES used more independent household and person estimates as benchmarks;
- extra detail was collected, or improved collection and/or processing methods were introduced, for information on mobile phones, taxes and fees on financial institution accounts, child care, education, disability, loans, industry of employment, tenure type, landlord type, gambling and income in-kind;
- new questions on financial stress and certain lump sum payments were included;
- the definition of dependent children aged 15 years and over has changed. It now includes full-time students aged 15-24 years who have a parent in the household (but no partner or child of their own). In previous surveys it included full-time students aged 15-20 years who had a parent or other relative in the household (but no partner or child of their own);
- a Household Expenditure Classification was introduced to replace the HES Commodity Code List (HESCL) used in earlier Household Expenditure Surveys. While a different numbering system is used, the basic classification is similar to the HESCL, with little movement across categories at the broadest level of the classification. At the detailed level, extra items have been created to cover new technologies such as digital

video disk players. In addition, 'not further defined' items have been separated from 'not elsewhere classified' items. Appendix 3 provides more information and includes concordances between the old and new classifications.

**5** The 1998-99 HES commenced field enumeration throughout Australia in July 1998. Field enumeration was completed in June 1999. Further information concerning the 1998-99 survey and the five earlier surveys conducted in 1974-75, 1975-76, 1984, 1988-89 and 1993-94 can be obtained from the **1998-99 User Guide** (Cat. no. 6527.0).

## CONCEPTS AND DEFINITIONS

**6** The concepts and definitions of income, expenditure and households in the HES are described in the following section. Refer to the Glossary for the definitions of other HES terms.

### Households

**7** The household is the basic unit of analysis in the HES. It is defined as a person or group of people who usually live in the same dwelling and make common provision for food and other essentials of living.

**8** Households therefore have the following characteristics:

- they may consist of one or more related or unrelated persons or groups of persons such as families;
- they must live wholly within one physical dwelling. A group of people who make common provision for food and other essentials of living but live in two separate dwellings are in two separate households;
- lodgers, who receive accommodation only (not meals) are treated as a separate household; and
- boarders, who receive accommodation and meals, are treated as part of the household.

**9** The household is adopted as the basic unit of analysis because it is assumed that sharing of the use of goods and services occurs at this level. If smaller units, say persons, are adopted, then it is difficult to know how to attribute to individual household members the use of shared items such as food, accommodation and household goods.

### Expenditure

**10** The HES estimates of expenditure on goods and services refer to:

- **the cost of acquiring goods and services.** The cost of those goods and services acquired during the reference period regardless of whether the household paid for or consumed them during the period;
- **the cost of goods and services used for private purposes.** Costs associated with investments and business were excluded from estimates of expenditure;
- **net or out-of-pocket expenditure.** Refunds and reimbursements (such as Medicare refunds, factory rebates, trade-ins and reimbursements from employers) were deducted from expenditure;
- **some expenditure in-kind.** Costs of selected goods and services provided free or at a reduced cost by employers to employees for their own private use were included in estimates of expenditure. Only incidental items such as food and motor vehicle fuel reported in the diaries were included; provision of vehicles, housing and assistance with telephone calls were excluded but are available separately if required;
- **expenditure during and prior to the 1998-99 financial year.** Most types of expenditure were collected for the 1998-99 financial year but less frequent and often large expenditures were collected on a 'recall' basis. For those items, households were asked to recall expenditures over a period ranging from their last payment to two years (e.g. for house purchases).

**11** Estimates of selected other payments (income tax, mortgage repayments (selected dwelling), other capital housing costs and superannuation and life insurance) are also provided.

**12** Estimates of **average weekly expenditure** do not refer to a given week. Average weekly expenditure was calculated by dividing expenditure by the number of weeks in the recall period or reporting period over which it was collected.

**13** Expenditure was classified according to the Household Expenditure Classification. A copy of the classification is included in the **1998-99 User Guide** (Cat. no. 6527.0).

### Income

**14** Although the HES is primarily a survey of household expenditure, household income estimates are produced to

help explain variations in expenditure levels and patterns and to identify groups of special interest (e.g. households with low incomes).

**15** HES estimates of income refer to:

- **gross receipts**, that is, income prior to the payment of personal income tax;
- **usual receipts**, that is, the income which was most frequently received over a given period rather than the income which was actually received;
- **cash receipts that were regular and recurring**; and
- **selected employee income in-kind**, as described under expenditure in-kind above.

**16** Receipts which were excluded from income because they were not cash, regular or recurring consisted of the following:

- **capital transfers received** such as:
  - inheritances and legacies;
  - non-recurring gifts from other households;
  - capital repayment of loans from other households;
  - maturity payments received on life insurance policies; and
  - lump sum compensation for injuries.
- **capital gains and losses**, such as profit from buying and selling shares unless as a business.
- **receipts from running down assets** (excluding receipts from pension funds), such as:
  - withdrawals from savings; and
  - loans and credit obtained.
- most **income in-kind**, such as:
  - the value of home-produced goods unless received from own business; and
  - non-monetary gifts from other households.

See description of expenditure in-kind, above, for inclusions.

**17** Estimates of **weekly income** do not refer to a given week. Income was collected using a number of different reporting periods, such as the last financial year for own business and property income and last pay for wages and salaries and other sources of private income. Reported income was divided by the number of weeks in the reporting period to obtain weekly income.

**18** Income was collected according to source. Main sources of income include employee income, own business income, government pensions and allowances and other income (including property income such as rent, interest and dividends and other transfer income such as regular recurring receipts from superannuation and child support).

#### **Difference between income and expenditure**

**19** The HES provides information about both the income and expenditure and the expenditure of households, but it would be misleading to regard the difference between average weekly income and the sum of the items of average weekly expenditure as shown in the tables in this publication as a measure of saving.

**20** First, to be properly understood, the concept of household saving needs to be articulated along with the concept of household wealth (assets less liabilities), and all forms of income and expenditure need to be measured and classified consistently with these concepts. The HES does not attempt to do this. For example, the HES measure of income does not include capital gains or windfall gains such as inheritances. Rather, it focuses on the regular and recurring forms of income; expenditure on current consumption of goods and services; the major component of regular current transfers (income tax); and three major items of expenditure which can be regarded as investment ('mortgage repayments - principal (selected dwelling)', 'other capital housing costs' and 'superannuation and life insurance'). The three items of investment expenditure are included in the HES because they are a significant regular commitment of many households which have to be financed from regular income.

**21** Second, there are significant timing differences between the different components of income and expenditure collected:

- expenditure does not cover all current payments because expenditure was collected on an acquisitions basis;
- income does not cover all current receipts because it was collected on a usual receipts basis;
- expenditure does not cover a common reference period. Expenditure estimates for different items refer to different periods; and
- income does not cover a common reference period. Income estimates for different sources of income refer to different periods.

**22** The timing problem is likely to be greatest for households for which the major source of income is unincorporated

business activity. Recorded income will relate to the previous financial year, while expenditure will mostly relate to a period within the current financial year. If business profitability is significantly different between the two years, then there may be a significant discrepancy between the recorded income and expenditure components which do not reflect the saving pattern of the household. While such differences will disappear to a certain extent through summing across households, there may still be an impact on aggregate estimates if, for example, all farmers had a bad season in one year and a good season in the following year. More importantly, there will be a definite impact on the quintile analysis of HES data.

**23 HES income and expenditure estimates therefore do not balance for individual households or for groups of households and the difference between income and expenditure cannot be considered to be a measure of saving.**

## SCOPE AND COVERAGE

### Scope

**24** Residents of private dwellings in all areas of Australia except remote and sparsely settled areas were in scope. Also excluded were households containing foreign defence force staff, foreign diplomats or diplomatic staff.

- **Private dwellings** were houses, flats, home units, caravans, garages, tents and other structures that were used as places of residence at the time of interview. These were distinct from special dwellings which included hotels, boarding houses and institutions. Residents of special dwellings were excluded because of differences in their lifestyle and accommodation.
- **Remote and sparsely settled areas** were areas in which there were less than 0.06 dwellings per square kilometre.

For most states and territories the exclusion of people in sparsely settled areas has only a minor impact on any aggregate estimates that are produced because they only constitute a small proportion of the population. However, this is not the case for the Northern Territory where such persons account for over 20% of the population.

### Coverage

**25** Information was collected only from usual residents. **Usual residents** were residents who regarded the dwelling as their own or main home. Others present were considered to be visitors and were not asked to participate in the survey.

## DATA COLLECTION

**26** Information for each household was collected using:

- a computer assisted household interview questionnaire which collected information on household characteristics, expenditure common to all household members (e.g. health service payments), and irregular or infrequent expenditure (e.g. household appliances and holidays overseas);
- a computer assisted individual interview questionnaire which collected information on income and other personal characteristics; and
- a personal diary in which people recorded their expenditure over two weeks.

**27** Sample copies of the above documents are available for purchase - see appendix 1.

## SURVEY DESIGN AND ESTIMATION

### Sample design

**28** The sample was designed to produce reliable estimates for households resident in private dwellings aggregated for Australia, for each state and for the capital cities in each state and territory. Of the selected dwellings, there were 8,908 in the scope of the survey, of which 6,893 (77%) were included as part of the final estimates.

### Responding households

**29** Of the households selected in the sample, there were 2,015 which did not contribute to the values of HES expenditure or income. Such households included those who could not be contacted, had language problems, refused to participate, or were affected by death or illness of a household member. Also excluded were those in which the reference person or spouse did not respond to key questions in the survey such as income.

### Imputation

**30** Of the households which provided most of the required HES information but were unable, or unwilling, to provide all of it, some were able to be retained in the sample and their missing values deduced or imputed.

**31** For some of these households, missing information could be deduced using additional information supplied on the questionnaire (such as prices for given quantities and types of bread and milk purchased from given types of outlets).

**32** In the remainder of cases, the missing information was imputed. Imputation is the process of replacing missing values with substitute values during processing. Imputation was carried out at two levels:

- where a value was missing for a particular item, the missing value was replaced with a value which had been reported by another person or household with similar characteristics; and
- where questionnaires or diaries were missing for a person in the household (other than the reference person or spouse) the missing information was replaced with whole questionnaires or diaries of another individual from a household with similar composition and characteristics.

**33** In either case, the record providing the missing information is known as the **donor** record. Donors were selected so that, as far as possible, the information they provided would be an appropriate proxy for the information that was missing. Depending on which values were being imputed, donors were taken from the pool of complete households or individual records with complete information for the block of questions in which the missing information was located.

**34** To better match donors to recipient records, both sets of records were ordered according to characteristics (such as number of adults and children present) associated with the blocks of variables being imputed. Recipients with missing information were matched with donors who fell into the same classes as themselves.

### Final sample

**35** The sample on which estimates were based, or the **final** HES sample, is composed of households for which all necessary information is available. The information may have been wholly provided at the interview or may have been completed through imputation for partially responding households. The 1998-99 HES final sample includes approximately 600 households which had at least one imputed value. Over 40% of these households had only a single value missing.

### HES FINAL SAMPLE: NUMBER OF HOUSEHOLDS, 1998-99

	Capital city	Balance of state/territory	Total
New South Wales	1,327	706	2,033
Victoria	992	377	1,369
Queensland	580	516	1,096
South Australia	420	144	564
Western Australia	475	175	650
Tasmania	389	91	480
Northern Territory	335	89	424
Australian Capital Territory	277	-	277
<b>Australia</b>	<b>4,795</b>	<b>2,098</b>	<b>6,893</b>

### Weighting

**36** Expansion factors, or weights, are values by which information for sample households is multiplied to produce estimates for the whole population.

**37** Initial weights, based on the sample design, were equal to the inverse of the probability of selection. Weights for each member of the household were the same as the weight for the household itself.

**38** In previous surveys, these initial weights have been adjusted to account for non-response. For the 1998-99 HES the demographic and geographic information available for non-respondents was analysed to determine whether a strong relationship existed between household non-response and its demographic and geographic characteristics. No strong relationship was detected so no adjustment to the initial weights to account for non-response was required.

### Benchmarking

**39** To adjust for under-enumeration and to align survey estimates with independent population estimates, the weights were calibrated against person and household benchmarks. Using an iterative procedure, the weights were adjusted so that person and household estimates conformed with external person and household benchmarks. The

two person benchmarks which were used are: state/territory population estimates by eight age categories (including 65 years and over); and labour force status estimates (from **Labour Force Survey** data) by capital city / balance of state or territory by sex by five age categories. The two household benchmarks were: nine categories of household composition (including lone person household) by capital city / balance of state or territory; and state by capital city / balance of state or territory.

**40** The household benchmarks were based on provisional estimates of numbers of households in Australia. The benchmarks were adjusted to include households and persons residing in private dwellings only and therefore do not, and are not intended to, match estimates of the total Australian resident population published in other ABS publications.

**41** The benchmarks do not include people living in sparsely settled areas in the Northern Territory.

### **Estimation**

**42** Estimates produced from the survey are usually in the form of averages (e.g. average weekly household expenditure on clothing and footwear), or counts (e.g. total number of households who own their dwelling). For counts, the estimate was obtained by summing the weights of the responding households in the required group (e.g. those households owning their dwelling). Averages were obtained by adding the weighted household values, and then dividing by the estimated number of households. For example, average weekly expenditure on clothing and footwear by Victorian households is the weighted sum of the average weekly expenditure of each selected household in Victoria who reported such expenditure, divided by the estimated number of households in Victoria. Note that the denominator is the total number of households and not just the number of households which have reported expenditure on the particular item.

**43** Income tax payments were estimated for all households using taxation criteria for 1998-99 and the income and other characteristics of household members reported in the survey.

### **Reliability of estimates**

**44** The estimates provided in this publication are subject to two types of error.

#### Non-sampling error

**45** Non-sampling error can occur whether the estimates are derived from a sample or from a complete collection. Three major sources of non-sampling error are:

- inability to obtain data from all households included in the sample. Although a non-response adjustment to the sampling weights was not necessary (see paragraph 38), some bias may remain;
- errors in reporting on the part of both respondents and interviewers. These reporting errors may arise through inappropriate wording of questions, misunderstanding of what data are required, inability or unwillingness to provide accurate information and mistakes in answers to questions; and
- errors arising during processing of the survey data. These processing errors may arise through mistakes in coding and data recording.

**46** Non-sampling errors are difficult to measure in any collection. However, every effort was made to minimise these errors. In particular, the effect of the reporting and processing errors described above was minimised by careful questionnaire design, intensive training and supervision of interviewers, asking respondents to refer to records whenever possible and by extensive editing and quality control checking at all stages of data collection and processing.

**47** The error due to non-response was minimised by:

- re-visiting all initially non-responding households in order to explain the importance of their cooperation to the project; and
- ensuring the weighted file is representative of the population by calibrating to benchmarks.

#### Sampling error

**48** The HES estimates are based on a sample of possible observations. Hence, they are subject to sampling variability and estimates may differ from the figures that would have been produced if information had been collected for all households. Further information on sampling error is given in appendix 2.

### **PUBLICATION AND DISSEMINATION OF DATA**

**49** Information about the range of data to be made available from the 1998-99 HES is given in appendix 1.

## About this Release

### ABOUT THIS RELEASE

Contains expenditure data by commodity/service (at the most detailed level available), cross-classified by income and State, Canberra and Darwin.

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## Explanatory Notes

### Data Cubes (I-Note) - Data Cubes

These tables are companion data to the publication **Household Expenditure Survey: Detailed Expenditure Items** (cat. no. 6535.0), which was released on 27 September 2000.

- "State and Quintile Detailed Tables" contains the 6 tables in the publication. They present detailed household expenditure data by income quintile, and by State/Territory.
- "Capital City Detailed Tables" contains 3 tables which provide detailed household expenditure data for all capital cities of States and Territories.

The files above also include a sheet providing information on relative standard errors.

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